

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Japanese Patent Publication 9-197394 (Akira et al.) in view of Frederick (U.S. Patent 4,373,611), Mizutani et al. (U.S. Patent 6,258,666), Japanese Patent Publication 2003-150093 (Hiroyuki) and Mizuno et al. (U.S. Patent # 5,466,325). Akira et al. shows a method for peeling a film (element 1) from a display panel (element 2) the method making use of a film peeling device that comprises: a transport pallet, not shown, used to transport the display panel perpendicularly past a roller (paragraph 0016); and a cylindrical roller (element 4) disposed above the transport system where the effective length of the roller is longer than the length of the short side of the display panel wherein (See Fig. 1), and the method comprising: peeling off an end of a film that has been stuck on a display panel; fixing the peeled end of the film to the roller that is adjacent to or in contact with a panel face of the display panel; and peeling off the film from the display panel by rotationally driving the roller (English Abstract and partial translation). Akira et al. fails to show an internal motor for the roller.

Frederick teaches that a roller can be driven by either an internal or external motor (column 1, lines 23-26). It would have been obvious to one of ordinary skill in the

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art at the time of the invention to replace the external motor of Akira et al. with an internal motor because Frederick teaches the two to be functionally equivalent alternate expedients. The references as combined fail to show the contact plate.

Mizutani et al. shows a peeling roller for removing a film from an electronic substrate wherein a roller, 5, and a contact plate, 6, are pressed by a mechanism to sandwich the film, 4, therebetween (See Figs. 1, 10b, 10c; column 3, lines 26-35; column 4, lines 15-22; column 5, lines 14-16). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the adhesive patches of Akira et al. with the contact plate of Mizutani et al. because Mizutani et al. shows the contact plate to be a functionally equivalent alternate expedient to the adhesive patches with the advantage that the film will not be contaminated with adhesive (column 3, lines 36-39). The references as combined fail to show the contact plate to have a convexity on its inner surface.

Hiroyuki shows a film peeling apparatus wherein a contact plate, 17, has a convex inner surface along its length to hold a film, 3, against the peeling roller, 16. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the inner surface of the contact plate of the references as combined convex to provide a greater contact surface between the contact plate and the peeling roller to ensure that the film does not slip. The references as combined fail to show rotating the roller and at the same time moving the transport pallet.

Mizuno et al. shows a method of peeling a film from a panel on a transport pallet wherein both the take-up roller is rotated and the transport pallet is conveyed at the

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same time so as to peel off the film on the surface of the panel (See Fig. 1; column 3, lines 32-38). It would have been obvious to one of ordinary skill in the art at the time of the invention to move the transport pallet simultaneously with rotating the roller because Mizuno et al. teaches that moving both simultaneously allows for a continuous process for removing films from a procession of panels.

Response to Arguments

3. Applicants' arguments filed June 28, 2011 have been fully considered but they are not persuasive. Applicants argue that the combination of references fails to show the step of rotating the roller and at the same time moving the transport pallet on which the display panel is mounted by use of the transport system. The rejection of March 28, 2011 indicated that Mizuno et al. shows this step of simultaneously rotating the roller and moving the transport pallet on which the display panel is mounted by use of the transport system. Applicants contend that in the method of Mizuno et al., the resist pattern can be peeled off even when the wafer-transporting belt has been stopped as long as the reel is driven. This allegation is not germane to the combination of references. First off it is supposition and secondly whether it could function in another way is not a showing that it does not function in the way described. One of ordinary skill in the art would read the reference of Mizuno et al. as clearly showing the step of simultaneously rotating the roller and moving the transport pallet on which the display panel is mounted by use of the transport system.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK A. OSELE whose telephone number is (571)272-1235. The examiner can normally be reached on M-F 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Tucker can be reached on 571-272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/MARK A OSELE/
Primary Examiner, Art Unit 1745
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